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REMARKS

ON THE CHOLERA,

EMBRACING FACTS AND OBSERVATIONS

COLLECTED AT NEW-YORK,

DURING A VISIT TO THE CITY EXPRESSLY FOR  
THAT PURPOSE.

SECOND EDITION.

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MAURAN, J.

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## PREFACE.

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THE following remarks relative to the cholera were hastily thrown together in order to gratify the wishes of a few particular friends, who were anxious to be acquainted with the results of the observations we made during a visit to New-York. We are well aware that it is a mere "thing of shreds and patches" almost destitute of order or arrangement. Still as we aimed at a simple statement of facts, and have avoided all minuteness of detail excepting in so far as relates to what occurred at the above named City, perhaps the want of method may appear to the general reader an advantage rather than the reverse, as he may thus not be deterred from giving it that perusal which he might otherwise fear to undertake. It is truly an ephemeral production, and should it but meet the desires of those who requested it, our end will have been attained. We with pleasure acknowledge the polite attentions which we uniformly received from all our medical brethren with whom we met, and consider ourselves in an especial manner under obligations to Drs. Morrell, Baker and Gale for the facilities which they afforded us in prosecuting our post mortem examinations.

J. MAURAN,  
THOMAS H. WEBB,  
SAM'L BOYD TOBEY.

*Providence, July 14, 1832.*



## CHOLERA.

It is generally acknowledged that Cholera has existed in Asia for a very great length of time; but being considered as originating from the free use of fruits, and the influence of the hot seasons, did not attract particular attention, until the middle of the 17th century, when it proved more fatal than usual. According to Sydenham it made its appearance in England in the summers of 1669 and 1676, and was so violent that it “frightened the by-standers and killed the patient in twenty-four hours.” In 1762 it prevailed in Bengal, where, in addition to eight hundred Europeans, thirty thousand negroes fell victims. In 1781, a division of Bengal troops at Ganjam was so violently seized with it, that five thousand were sent to the hospital on the first day; men apparently in perfect health, dropped down and died instantaneously; but still it did not assume the dreadful aspect and fatal epidemic character it now presents, until August, 1817, when, on the 18th of the month it broke out at Jessore, a filthy and unhealthy town situated on the Delta of the Ganges, N. E. of Calcutta, distant sixty miles. The mortality amounted to twenty or thirty a day; and in the course of a few weeks the number was swelled to six thousand. From the above date to the present period it has been making rapid strides, until it has at length traversed the greatest part of Asia, ravaged some of the most populous cities of Europe, made incursions into Africa, crossed the Atlan-

tic and appeared in ten fold horror on the confines of our own frontiers; as is evinced by the fact of the Canada mortality having been seventeen times greater than that at Paris, frightful as the latter was, and more than thirty times greater than at London. It is now prevailing in a less malignant form in various parts of the State of New York, and judging from the past, we must expect ere it ceases that it will travel the length of our Continent. No climate, season, nor situation affords an immunity therefrom; for we find it raging with violence in the hottest regions of Asia, the coldest sections of Europe, the temperate districts of both; we see it in the valley, on the plain and at the mountain top; on the sandiest soil, as well as amidst swamps and marshes; in the village and hamlet, alike with the city and town; the interior of the country, and the vicinity of the seaboard; it prevails in the depths of winter, the midst of summer, during the spring, throughout the fall. “It has traversed,” says a foreign writer, “the burning sands of Arabia, as rapidly as the banks of the Euphrates; Caucasus and Mount Ararat, in common with the jungly marshes which are periodically bathed in the waters of the Ganges; and although the number of healthy whom it has infected, and the number of infected whom it has destroyed, considerably vary with the density, health, and habits of the population, the Tartar and the Turk, the Indian Nabob and the Persian Prince, have indiscriminately suffered.”

It has surmounted every natural barrier, conquered every people, and bid defiance to the strictest quarantine regulations. It has not as is erroneously as-

serted by some, followed any one particular course, no travelled invariably towards a western point of the compass. Every individual who will take the trouble to glance his eye over a map, will perceive, that so far from pursuing such a direction, it has (to use the mariner's phrase) completely boxed the compass. It has repeatedly taken a certain town as a centre and radiated in all directions therefrom. From Aleppo it went in three directions; viz: north, east and south; upwards to Adana, inland through Damascus, &c. along the Mediterranean coast downwards to St. Jean D'Acre. From Jessore it travelled north to Dacca, south to Chitagong, and a few months subsequently was traced along the eastern shore of the Bengal Bay, thence south east to Siam and Malacca, Sumatra and Java, and at length up the Chinese Sea to Canton, Nankin and Pekin. It traversed the peninsula of Hindostan not only from east to west, but in a much shorter time the whole length of the same from north to south. It ascended the Persian Gulf, spread on the one side into Arabia, on the other into Persia. From Sunderland it went first northerly to Edinburgh, then southerly to London, and afterwards west to Dublin, as well as south to Paris. It broke out at Berlin, August 1831, Vienna south east therefrom in September, and Hamburg north, soon after. It has appeared in certain places, without affecting the intermediate spots, and afterwards returned and completed its work, in almost every scattered village or hamlet. It has hovered around spots for years and finally burst forth with a violence that has most wofully counterbalanced the security into which the inhabitants

had flatteringly lulled themselves, from having been so long spared by the fell destroyer. “It has not like the Simoom blasted life and then past away, but has often like the small pox or plague taken root in the soil which it has once possessed.” In the short space of 14 years Calcutta has been attacked 14 times, and still furnishes abundance of victims for sacrifice; Madras nine times and Bombay twelve.

With regard to the duration of the disease, the degree of mortality &c. there has been a very great variation. Some have perished within an hour or two from the time of being attacked, while others have lingered along for days. Generally in New York, when fatal it ran its course within 24 hours.

The following is a minute of the first eight cases that were received into the Park hospital on the 10th inst. and these were carried there as soon after it was ascertained that they were affected with the disease, as the removal could be accomplished. The first was brought in at 11, A. M. and died at 11 P. M. the 2d at do. and died at half past 5 P. M. the 3d at do. and died at 10 P. M. the fourth at noon and died at 1 P. M. the 5th at 2 P. M. and died at half past 3, P. M. the 6th at  $\frac{1}{4}$  past 3 and died at 4, P. M. the 7th at  $\frac{1}{2}$  past 3 and died at 6, P. M. whilst the 8th alone was convalescent.

As respects mortality, the difference was as great as can well be imagined. Thus at Tiflis three fourths of the sick, at Astracan two thirds, and in the province of the Caucasus, out of sixteen thousand attacked, ten thousand, perished. At Brody in Austria, 1135 died in five days. But in no place perhaps have its ravages been more extensive than in Hungary, where in the district of Bri-

sod out of nearly six thousand sick, not one recovered. This dreadful mortality was attributed to the fact, that the inhabitants were unwilling to take medicine, from a wild and unfounded idea that the physicians had entered into a combination to destroy those who were sick. In China the number of deaths were so great that the burials were necessarily undertaken at the public expense.

We are told by a gentleman who was in Paris during its prevalence there, that while at its height, eighteen hundred fell victims in a single day. In other places however, but one tenth or one twentieth perished. In some towns one half of the population sunk under the disease, whilst at Tripoli but one in three thousand died. The whole number of cases in New York from July third to the tenth inclusive was three hundred and sixty-six, of which one hundred and thirty-six died.

**SYMPTOMS.** These have been so repeatedly described, it would be a work of supererogation for us to enter into a minute detail of them here; and consequently all that we propose is to give a general synopsis thereof, and append such remarks as may occur to us relative to what came under our personal observation while visiting the different Hospitals. The following are among the premonitory symptoms:—a sense of fulness, weight and distension of the bowels, wandering pains and griping in the same, an unnatural looseness, vertigo, headache, furred tongue, clammy taste of the mouth, nausea, vomiting, paleness of the countenance, general listlessness, coldness of the surface, &c. &c. These symptoms generally occur previous to a confirmed attack of the disease, and usually give a sufficiently timely warning to the individual to enable him to repel the enemy if

he be wise enough to resort to the simple means which are within the reach of all; but if heedlessly neglected, he may, when of no avail, bitterly rue the consequences; for sooner or later the more confirmed symptoms present themselves, and in a large majority of instances sweep the victims from existence. These are, an extreme prostration of the vital energies, or as it has been termed a collapsed state of the system, cold clammy sweats, a small, wiry almost imperceptible pulse, a falling of the lower jaw, a drawing down of the angles of the mouth, a loss of the brilliancy of the eye, a peculiar shrillness of the voice, tongue coated, and usually cold to the touch, a coldness of the breath, vomiting and purging of fluid like rice water, unaccompanied by ingesta, or fæcal, or bilious matter, spasms of the legs and arms, a cadaverous countenance, more or less blueness of the surface particularly of the face and hands, a shrivelled and macerated appearance of the latter as well as of the feet; &c.

According to our own observations, vomiting and purging are far from being prominent symptoms, when the disease has taken rank hold. Indeed in this respect, as well as with regard to the prevalence of spasms, the appearances were quite different from what we expected to see. In a very large proportion of cases all of these were absent, or occurred but seldom. There were a few patients however who suffered *much* from spasms, particularly of the fingers, arms and legs; and when very severe the action continued some time after death; we also noticed an involuntary contraction of the tendons previous to dissolution.

A remarkable instance of these spasms has been re-

corded by Dr. Sokaloy in the case of a patient who “twenty minutes after his last breath, and when the corpse had been already washed and dressed, was affected all at once with frightful movements—convulsive motions took place in the hands and feet, like those excited by Galvanism, commencing first in a few muscular fibres, especially in the neck and thighs, extending in a vermicular manner, and suddenly producing bending of the head, and agitation and elevation of the feet. These spasms continued with intervals for ten minutes, becoming in the end faint and rare. The same phenomena, though in a less remarkable degree, were observed on another occasion, so long as six or seven hours after the termination of the symptoms of the disease. In such cases the principle of vitality cannot be entirely extinguished; and as death always occurs suddenly in spasmodic cholera, such facts are sufficient to teach us the propriety of allowing a considerable interval to elapse before those who perish by this disease are consigned to the tomb.”

In the state of collapse the countenance had an anxious, cadaverous, haggard look, and was of a livid, sometimes extremely bluish cast.

There was not that difficulty witnessed in retaining drinks that might have been looked for, especially in the most urgent cases. In a few instances there was a low moaning or whining sound uttered by the patients. Some were tossing about their beds, having their limbs in constant agitation from the internal heat, weight and distress experienced, but generally they remained comparatively motionless; and although surrounded by others situated

in the same distressed condition, having in full view the lifeless bodies of those whose spirits had winged their flight from the earthly tabernacle which they inhabited, (some indeed lying almost in immediate contact with the ice cold corpse of a quondam bedfellow,) and in addition, although constantly receiving visits from strange physicians, who they were aware came there on account of the prevalence of an uncommon and awfully fatal malady, still they seemed to look on all the scene around with an apparent unconcern; and one the more astonishing, from the fact, that they seemed to, and as we are told do, possess their mental faculties unimpaired. This however we consider doubtful; for were the intellect in full vigor, could they with so much of a stoical indifference view unaffected the dreadful work of death that is constantly going on? Rather, we think, there exists a morbid state of the mind, tending perhaps to concentrate the whole feelings of the patient on himself and his own sad situation, leaving but little time or inclination for beholding or commiserating, or being alarmed at the situation of others.

The urinary secretion is almost always arrested, and seldom if ever does the patient evince a desire to pass his water after the first attack, unless he becomes convalescent. The perspiration is often profuse, giving rise to a cold, clammy feeling of the surface. The tongue is generally moist, and usually though not uniformly cold to the touch. The breath expired has also the same feeling. Notwithstanding this, great thirst was manifested, and with some a constant solicitude for drink prevailed. There was much complaint of heat at the epigastrium, and also at times of distress in some portion of

the head. The hands had a peculiar shrivelled and bluish hue; such indeed is their condition that should we judge of the age of an individual from the appearance they present, our decision would be very erroneous; the same indeed may be said of the countenance; the general aspect of which would lead the spectator to consider the patient much further advanced in life than is actually the case.

Every patient of whom we made inquiries remarked that they had labored for a longer or shorter period, varying from a few hours to several days previous to the invasion of the disease in its marked form, under an affection of the bowels, from which some had obtained relief, but again from carelessness had a relapse. Indeed, at New-York, as at almost every place where this fell destroyer has been, there has occurred very generally among the inhabitants a tendency to diarrhœa, gripings, nausea, vomiting, vertigo, &c. &c. but in an especial manner to an unusual looseness.

The chief diagnostic or distinguishing symptoms of this disease are, the peculiar expression of the countenance, its haggard look and livid hue, the coldness of the surface, the diminished force of the circulation, the small thread like, and often scarcely perceptible pulse, the watery, turbid, colorless, gruel-like evacuations without the appearance of bile or fœces, the absence of all desire to urinate, the blueness of the fingers and toes, and the shrivelled state of the hands and feet.

Through the politeness of Drs. Morrell and Baker, of the Belle-vue Hospital, and Dr. Gale, of the Crosby

street, we had an opportunity of making several post mortem examinations, of which three will here be noted in very general terms, leaving out all minute description of appearances not connected with the disease of which we speak. The first case to which we shall refer, was that of an inmate of the Crosby street Hospital. The man was formerly of respectable standing, but being disheartened by misfortune, fled to the brandy bottle for solace, and was eventually reduced to poverty and distress. He died July 9,  $\frac{1}{2}$  past 8, P. M. after a sickness of 30 hours. The examination was made July 10th. The spinal marrow was laid bare from the neck to the vertebræ of the loins, and the vessels supplying the same were found through the whole extent, engorged with black blood. The vessels of the brain as well as the aorta and vena cava (main artery and vein of the body) were similarly filled; and there was considerable watery effusion under the arachnoid membrane, (one of the envelopes of the brain.) The bladder was remarkably contracted, as is usually the case, says Dr. Paine, when much spasm occurs at the time of death. Gall bladder was of the ordinary fulness; duct pervious, though no bile was found in the duodenum, (the first of the small intestines.) The contents of the bowels had a greater consistency than usual. This case is chiefly spoken of in consequence of the examination made of the spine, which owing to the time it requires, is less frequently attended to than it should be.

The second examination was of a male aged 55, a resident at the Bellevue Almshouse. He was taken on the morning of the 10th inst. at one o'clock, with vomit-

ing and purging, and died in the course of the night. The dissection was made July 11, at noon. The countenance and indeed the general appearance of the surface not unnatural. Hands blue and shrivelled, having the usual washed or macerated appearance. Upon opening the cranium, the meningeal and other arteries of the brain were found much gorged with black blood. (In one case previously examined by us, the blood, after the brain was for a few moments exposed to the air, became changed to a florid, arterial color.) Upon proceeding to the chest, the lungs appeared natural. The cavities of the heart both on the right and left side, were filled with black blood, as also the aorta and vena cava. The whole of the blood was of a viscid, tarry consistence, and no difference could be detected between the contents of the arterial and venous vessels. On opening the abdomen, the omentum was found unhealthy and in a partially disorganized state. There was a slight adhesion of the convolutions of the intestines to one another, occasioned by a glutinous matter on their surface; this, however, is not found invariably to occur; although, as we were told by Dr. De Kay, it existed to a considerable extent in most of the bodies, by him examined abroad. The stomach and intestines were filled with the rice water fluid, so characteristic of this complaint, and the mucous (or lining) membrane of both was of a pink colored tinge. This last has been noticed in 20 out of 23 autopsic examinations here made. Where death is speedy after the attack the large intestines are found filled with the rice water fluid, as in this instance; but generally not, under other circum-

stances. In this case as has often been noticed here, the large intestines were much contracted from the sigmoid flexure downwards. Also when death is sudden, the contents are less flocculent than where the patient has lingered some time. Liver gorged with black blood, otherwise not unnatural. Gall bladder not distended, yet well filled with bile. Kidneys loaded with black blood. Bladder much contracted, though less than in other cases, and contained a small quantity of urine.

The third and last case of which we shall here speak, was that of a male aged 40. He was taken at daylight on the morning of the 10th inst. and was found vomiting and purging when visited at 8 o'clock, A. M.; he died at 8 P. M. Nothing remarkable in the external appearance. The vessels of the brain were not so overloaded, nor were their contents so dark colored, as in the preceding case. There was considerable effusion under the arachnoid membrane; and indeed this obtained to a greater or less degree, in most instances. The ventricles contained upwards of one oz. of fluid, being more than double the natural quantity, and there was also a large quantity poured forth from within the spinal sheath. The right and left sides of the heart almost empty; the aorta completely so, as far down as the bifurcation. The iliacs were filled with black blood and the vena cava contained a little. There was one polypus of considerable length extending far into the pulmonary artery. Omentum perfectly natural and highly loaded with fat. The vessels of the liver overloaded with blood. Gall bladder well filled; the duct free from all obstruction, so that the gentlest pressure

would cause the bile to flow out; this has held true invariably here. The stomach and intestines filled with the rice water fluid; the latter were completely blanched, as is common where the effusion is extremely copious. The duodenum contained some bile; a fact worthy of note, inasmuch as its universal absence is insisted upon by some individuals. The large intestines from the sigmoid flexure downwards contracted. The bladder was very much contracted, and contained but a few drops of urine. In 23 cases here examined, not the least appearance of fæces has been detected; in one half of the number the heart has been found empty of, and in the remainder filled with, blood. The two constant morbid appearances have been the absence of true arterial blood, and the presence in the stomach and intestines of the rice water fluid so often referred to. The intestines generally have a wasted or soaked appearance.

The difference between this disease and ordinary Cholera Morbus as shown by dissection, is this; in the latter the whole mucous membrane is minutely injected and much more reddened throughout its extent; there is a marked difference between the arterial and venous blood; the contents of the intestinal canal are generally bloody and intermixed with the ingesta, and the mucous membrane presents none of the washed appearance.

TREATMENT.—It is frequently remarked as a stigma upon the profession, that the medical faculty know nothing of this disease in a therapeutical point of view, and that there is a great want of success in its management.

But from what we observed ourselves, and ascertained in conversation with some of the most eminent practitioners in the city of New-York, we are satisfied that the reverse will hold true. If there be a want of success in a great many cases, it is owing to the late period at which the physician's aid is called for, and the completely broken down and worn out constitution of an immense proportion of those who are attacked. Of the two hundred and upwards by us seen and examined, we do not recollect a single individual who did not bear the marks of intemperance or dissipation of some kind about him, and had at the best so feeble a tenure of life, that it would require but a slight attack from almost any disease to snap the brittle thread that held him here. It was the opinion of all, that if called in seasonably, and before the dreaded enemy had his grasp firmly fixed, of which ample notice is almost if not uniformly given, nothing could be more easily managed, or would prove more completely under the control of medicine; but if, as unfortunately has been the case there and elsewhere, and probably will be wherever it prevails, those miserable beings most liable to the complaint, will suffer the attack insidiously to progress, until the system is compelled to succumb, nothing can reasonably be expected to prove advantageous. Much depends upon timely assistance, and prompt and decisive action; moments here are as days, hours as weeks, in ordinary disorders; early, every thing, late, nothing, can be expected. Our own views of treatment may be summed up in a very few words. We are decidedly and uncompromisingly opposed to what are termed *specifics*; and not less hostile to the treating for a

*name.* We must here as in other cases pursue a rational course, and consequently the treatment must be varied to suit the peculiar circumstances that each case will present. Much depends upon the constitution of the patient, his habits, the stage of the complaint, &c. consequently, what might prove salutary for one, would be in the highest degree injurious for another. Depleting remedies may be loudly called for in the first case, and powerfully stimulating ones in the second; therefore should either plan be indiscriminately pursued, it is evident that the result would be highly fatal.

No physician can consistently resolve upon a certain routine of practice beforehand, that shall be pursued by himself and others: as well may he prescribe medicines for his patients to be used years hence, if taken down with a given disease, whatever modifying circumstances may then occur. There has been no little complaint and fault finding in consequence of the total want of uniformity in practice among those who have had to contend with this disease. But there is much inconsistency in this. If there were but one symptom to combat, but one constitution to be affected by it, then should we be somewhat surprised if a regular, unvaried plan were not adopted to overcome it, and restore the system to its wonted vigor. But such not being the case, the variety of treatment resorted to should be a subject of congratulation.

As regards the practice that is followed in the different Hospitals, we will give a brief sketch, but desire to have it distinctly understood that we make no pretensions to a perfect and minute account of every thing that is tried, as much more may be done, and a greater variety of

treatment adopted at each or all, than what we here notice; we shall also in speaking of the different establishments, intersperse such general remarks relative to the disease as may suggest themselves to our minds as we proceed.

BELLE-VUE HOSPITAL.—*Chief physician, Dr. Wood: Resident physicians, Drs. Morrell and Baker: Special physicians, Drs. Gardner and Devan.*

Belle-vue Hospital contained by far the largest number of inmates, and such too as were the most likely to be singled out in an especial manner by the destroying angel. It includes the Almshouse, a Hospital for the sick, and a Penitentiary. The average number of persons dwelling here is about twenty-five hundred. We saw on the morning of our first visit in the rooms of the building set apart as a Cholera Hospital, forty patients in various stages of the disease, four at the point of death, and the lifeless bodies of thirty-one lying on the floors and in the beds. So rapidly fatal was the disease, so unexpected the attack, and so unprepared as regards physicians, nurses and other attendants were they, that the appearance of things was truly appalling. Those officiating there did all that could be done, but they contended against fearful odds, not only as relates to numbers, but the virulence of the disease and the constitution and habits of the sufferers. Having obtained additional aid from the city every thing was presenting a more favorable aspect before we took our final departure. Dr. Morrell considered the pathology of the disease to consist in an exalted action of the excretory system. The treatment here consisted in the liberal use of

The lancet the moment the patient was seen, whatever stage might exist, or circumstances prevail. It was often found extremely difficult to abstract blood, owing to its having deserted the surface or superficial veins, and to its unusually thickened state: when drawn it was very dark colored, but after flowing for a short time became more fluid and otherwise natural in appearance. That of one patient that we saw was of the color and consistency of a cranberry tart, and so completely destitute of serum and so adherent was it that the vessel containing it could be inverted without the least fear of its escaping. In addition to v. s. diffusible stimulants were employed with or without anodynes; e. g. the following mixture: Take of sulphuric ether and laudanum each one ounce, brandy two ounces; mix, and administer a table spoonfull every half hour until reaction takes place. A powder consisting of capsicum grs. 3 and calomel grs. 6 was also given. As a draught well calculated to allay irritation of the stomach, and correct the morbidly increased action of the excretories, presumed to exist, the following is advised viz. Alum one oz. Muriate of Ammonia half an oz. spirits of Camphor four ounces and water one gallon. Dose, half a wine glassfull or more, repeated as the exigencies of the case may demand. For the purpose of arresting the rice water excretions and checking the discharges, a solution of alum was used as an enema. Externally mustard in the form of a poultice was considerably employed. If by these means the state of collapse can be prevented, the patient is comparatively secure; but if all the efforts prove unavailing, and the collapse

set in, there is little room for hope; there not having been a single case of recovery here under such a state of affairs.

We noticed an almost universal demand for drink. Cold water, cold water, give us cold water, was the constant and imploring cry, and this was undoubtedly craved to allay the burning heat so much experienced at the pit of the stomach. From June 27 to July 11, 203 patients were admitted, of whom 23 were cured, 79 died and 101 remained under treatment.

**PARK HOSPITAL.**—*Chief Physician Dr. Tappan: Assistant Physicians, Drs. Bucl and Hitchcock.*

Of the four temporary hospitals located in the city, this has received the greatest number of patients. The treatment here consisted in venæsection; topical bleeding to remove local congestions, internal stimuli as brandy and ether, pill or powder of calomel and opium, application of bags of hot sand, bottles of water &c. to the feet and sides of the body, mustard cataplasms, and occasional hot air baths. To relieve violent spasms much dependence was placed upon friction with camphorated spirits. Here, as well as in some other of the hospitals, the air was somewhat disagreeable from the want of a free ventilation of the rooms, the windows being kept constantly closed in order to facilitate the restoration of the warmth of the system. Indeed in one room we noticed a large fagon filled with burning charcoal, negligently placed there by some one of the waiters in attendance, unquestionably without the knowledge of the physicians. That every salutary means that can be thought of, should be perseveringly

employed, to relieve the coldness of the surface we are well convinced; but we are equally impressed with the importance of having pure air; neither do we think there is any insuperable difficulty to be met with in effecting both ends. We also particularly noticed the almost if not complete want of noisome odour in the discharges. So generally was this the fact that we should never have known by the organs of smell that there existed, or had been any alvine evacuations in the several wards. This was the more forcibly impressed on our minds from the circumstance of having rarely seen any disinfectants standing around, and from the confined state of the air being so admirably calculated to imbibe and develope in its fullest strength whatever of fœtor that might have been emitted from the evacuations.

The Park Hospital was opened July 4, from which time up to July 11, 64 have been admitted, of whom 36 have died.

GREENWICH HOSPITAL.—*Physicians, Drs. Roe and Lee.*

Here they rarely bleed; never, except when early called. The chief stimulant internally employed is Carbonate of Ammonia in the form of a pill, with the addition of Morphia to allay irritability; for which last purpose small doses of opium are also used, as pills, of a grain each. Cool drinks in moderate quantities were allowed the patients. Dr. Lee observed he had succeeded in reviving three after they had been in a state of well marked collapse; two also had recovered in his private practice. The tobacco injection was tried in one such case as recommended by Dr. Kirk. Proportions,

one dr. to the pint of water; half used at a time. The pulse arose soon after administering it, and the patient at the time of our visit was comfortable; the final result of the case is not known. The medicine was followed by different effects from what could possibly have been conjectured, reasoning from what we know of the properties of the article, and so frequently observe as the consequence of its use. Dr. Rhineland, and we think every other physician spoken to, considered a case when thus advanced so utterly hopeless as to be beyond the power of every remedial plan with which they were acquainted. In one case the inhalation of nitrous oxide (exhilarating) gas was tried; but nothing decisive was ascertained, owing to the smallness of the quantity obtained for the trial.

Of the external applications employed, a preference was given to frictions with hot pulverised chalk, which would restore the heat much more effectually and readily than any thing else. This as we were told by Dr. Dekay was extensively used at Montreal and Quebec; but its *modus operandi* was not clearly understood, although upon reflection it appears at least to be quite simple. The body is generally covered with a cold clammy sweat which is profusely poured forth; the chalk acting as an absorbent, dries the surface, and at the same time by its great heat communicates warmth to the parts; whereas, sand, &c. having none of the absorbing properties, cannot, though equally hot, be productive of as much good, and may indeed, the limbs being uncovered, increase the coldness by promoting the evaporation of the fluid effused. They also

have used a bath made of cayenne pepper and water. This hospital was opened July 6, and up to July 11, had received 26 patients of whom 9 have died, and 11 remain under treatment.

CROSBY ST. HOSPITAL.—*Chief Physicians, Drs. Rhineland and Depere, Assistant Physicians, Drs. Gale and Walsh.*

The notes taken at this hospital have been mislaid, and therefore little can be said relative to the course there pursued. Upon the supposition that the pathology of the disease might consist in an inflammation of the spine, a patient who was brought in, it was said in a state of asphyxia was cauterized about two thirds the length of the spine, by inflaming cotton dipped into a solution of nitre. In the course of fifteen minutes he revived, and at the time of our visit, two hours and a half afterwards, the reaction seemed perfect and he was quite comfortable;—has had nothing administered since but brandy and water. At our visit on the subsequent day we learned that in the course of the night he relapsed and died. Among other stimulants here employed with an apparently good effect is an enema of mustard, opium, camphor and hot water.

This hospital was opened July 8, and there were admitted up to July 11, 19 patients, of which 7 have died, 3 have been discharged, and 9 remain under treatment.

RIVINGTON ST. HOSPITAL.—*Chief Physician, Dr. Willet, Assistant Physician, Dr. Linsley.*

Bleeding very seldom resorted to here. Great use made of the hot air bath. Ice and iced-water freely allowed the patients, which seem very grateful to them

and so far from adding to their distress, materially alleviate it. As a counter stimulant, they bathe the surface over the stomach with strong acetic acid containing spanish flies. To relieve vomiting, they resort to a mixture of laudanum, ether, and peppermint.

One of the most dreadful cases that we witnessed was that of a girl about 20 years of age, of an abandoned character, who was carried to this hospital just previous to our arrival. When we saw her, she appeared considerably alarmed in consequence of the uncontrollable grief of her mother, who was standing by the bed side. Her voice was clear and distinct, and she was imploringly inquiring if all had been tried that could be, or whether there yet remained a chance of her recovery? In less than *20 minutes she was a corpse*. The day previous, she was full of life and spirits. Although it is useless for us to endeavor to convey a correct idea of the scene in words, it produced an impression on our minds, that will not be readily effaced.

Whilst speaking of the treatment at the Belle-vue Hospital, we omitted to refer to an interesting fact mentioned to us by Dr. Morrell. A patient in a collapsed and apparently moribund state was brought in; a vein was opened in his arm, and a pint and a half of water heated to the temperature of 98 degrees was injected. He was aroused thereby, and evidently revived for a time, but at the termination of 24 hours expired. Oxygen was also administered by inspiration under similar circumstances but with less strikingly good effects.

The diet at this establishment consists of wheat bread, and tea sweetened with molasses, for breakfast and sup-

per, and meat, and indian meal pudding on alternate days for dinner. The health of the inmates previous to the breaking out of the cholera, had not been better for many years. A similar remark holds true relative to the general health of the city. According to the Inspector's Report the number of deaths occurring during the week ending July 7, was 191 including 56 from cholera.

It has sometimes been asked us whether the official Reports of the Board of Health can be received as giving a true account of the state of the disease in New York? To this we would reply that we believe they are entitled to entire confidence—great industry and care are exercised in preparing them—and although cases exist in the city that do not come to the knowledge of the Board, it is safe to conclude that they are not more numerous than those which are prematurely reported as cholera, and in the end prove only to be the ordinary complaint of the season.

It seems to be impressed on the minds of those in the more humble walks of life that this is a disease of the poor—but we are satisfied that the tidy, the honest and the virtuous of that class have no especial cause for alarm—let them continue sober, industrious and regular in all their habits and their prospect of escape is equally as good as that of those in more affluent circumstances;—particularly as they too often convert what was intended to contribute to their happiness into the means of their own destruction.

The subject of the contagiousness or noncontagiousness of disease, is one that has ever involved the world and medical men particularly in doubt and too often has

led to unsatisfactory and acrimonious discussions. It is a question which with regard to the prevalence of some diseases is not likely ever to be settled by the arguments of those who have adopted either theory—for so little is the distinction between a contagious and an epidemic disease to the common observer that the same facts will to the espousers of the respective theories be converted by them into evidence of the correctness of each of those theories—We went to New York with no theory to support—we were in pursuit of truth in whatever form it might be presented. By the statement of all the physicians with whom we conversed on the subject, we learned that the first case of cholera in N. York occurred in the person of an inmate of the penitentiary at Belle-vue, aged 83 years, who had not left the house for 3 years and into whose department of the establishment no person had been placed for the previous fortnight—his case was strongly marked during his sickness and post mortem examination revealed all the characteristic appearances of the spasmodic cholera—on the succeeding day two others were attacked and subsequently it extended in that institution—Several days after the date above designated it sprung up simultaneously in different parts of New York in subjects who were residents of the City and between whom there could have been no communication—Physicians and nurses who are constantly engaged among those sick with cholera have been no more subject to its attacks than those who keep aloof from the disease—it is true a few employed to take care of the sick have been attacked, but in every instance so far as we could learn they were of intemperate

habits; and even if this were not so, the noncontagionist would say that an epidemic or atmospheric influence would surely be as likely to induce the disease in a person subjected to excessive fatigue in a sick chamber, and deprived of sleep, as in him who was not under the influence of such causes—Another fact came to our knowledge worthy of notice here, viz. that nearly every citizen of N. York, under whatever circumstance of location or situation in life, was affected with more or less of uneasiness in the bowels which if neglected would probably induce an attack of this disease—These among other considerations convinced every medical man of that city, so far as we learned, that there was an influence around them universal in its application and to which all were subjected. We will not say that this disease is never contagious, but we think our observations in New York justify the conclusion, that it does not exist there at the present time as a contagious disease; but is a wide spread epidemic that bids defiance to any barriers raised against its progress by sanitary cordons.

In conclusion we would make a few general observations; in offering which we profess to be governed by correct and honorable motives. Medicine should not, as is too often the case, be looked upon as a mere “dollar and cent concern;” it is truly a noble science, and in such a light should it be held, and thus cultivated; and as in the brief remarks we are about to offer, we shall run counter to our pecuniary interest, we can but trust our readers will do us the justice to believe that we have been influenced strictly by a sense of duty, and a desire to be useful in our own day and generation.

The question which is on the tongue of every one, and which most deeply interests all at this moment, is, “what are the means of preventing a visitation of this disease?” It is well ascertained, as has been remarked in the preceding pages, that previous to an attack of cholera, certain symptoms premonitory thereof exhibit themselves; among these we would recapitulate, a complaint of uneasiness in the bowels, with a gradual change in the appearance of the discharges, from a brown to a lighter color, a furred tongue, a general sense of oppression, languor, listlessness, &c. These feelings it is true are not absolutely characteristic of the disease, but still they are omens not to be neglected with impunity. To prevent or guard against the accessions of this dreaded complaint, at a season like the present, when the weather varies so materially from day to day, being at one time oppressive by its heat, at another uncomfortable by its coldness, alternately wet and dry, too great precautions cannot be taken as respects clothing; let flannel be worn next to the skin, and the remainder of our dress be such as is the best adapted to withstand the unwholesome influence of sudden changes of temperature; let there be sufficient covering on beds, and in a particular manner let all unnecessary exposure to the night air by sleeping with opened windows be shunned.

*In Diet* we would avoid the abstemiousness of the anchorite, not less than the luxuriousness of the epicure. Let food be plain and nourishing; avoid for the most part, fat and greasy articles, salt meats, sour wines and beer, green fruit, green and watery vegetables, such as cucumbers, melons, &c.; in short all excesses in eating

and drinking; being temperate in the legitimate sense of the term. Let the individual, who will profit by experience, pursue that course in relation to food which his own good sense may dictate, as being the most salutary; for *general directions alone* can be given him; he only can judge of the beneficial or injurious effects of each separate article; if he enjoy good health under the system of diet he is pursuing let him make no change with the hope of still further improving his condition; be his motto, "*let well alone.*"

We cannot too earnestly enjoin upon every one, an abstinence from the use of all ardent spirits, as it is *undeniable that intemperance is a powerful predisposing cause*, to this complaint.

As relates to the condition of the body, we would recommend the keeping of the stomach and bowels in good order, preserving them as nearly as possible in a naturally healthy condition, whatever that may be; and consequently avoiding as respects the latter, too great looseness or extreme costiveness.

Among the most productive causes of ill health, must be ranked the use of what is very unphilosophically and absurdly termed *preventives*; as for instance, the temperate use of *brandy* which has been highly recommended in some of the newspapers abroad; *shun it as you would the pestilence itself*; for it leads to a derangement of the stomach, and too often proves but the advance courier of the enemy against whom we are endeavoring to protect ourselves. In the same breath, we would warn all against resorting to the reputed *specifics* of the empiric; for they are the source of incalculable mischief; medi-

cines, when so much depends upon pursuing the right path at the onset, should not be tampered with. Abandon therefore all thoughts of supplying yourselves with *Cholera medicines*, (so called) or if you have already procured them, set them aside, and banish all recollection of ever having possessed them—the anxiety to ascertain whether you have the symptoms suitable for their application is of itself a predisposing cause to the complaint; to say nothing of the risk of administering them improperly.

We exclaim most earnestly, “Throw physic to the dogs.” “The *well* need not a physician, but the sick.” The disease is not usually so sudden in its attack as to prevent the procuring, seasonably, competent medical advice. We have purposely omitted entering into details relative to treatment, because as observed in the preceding pages, so great a variety of circumstances may occur to modify the plan to be adopted in different cases; which modifications can only be judged of and successfully combatted as they may arise; and at such times, can be most safely encountered by those who from the nature of their profession have watched the progress and studied the varied symptoms of the disease, as they have appeared, from its first outbreaking to the present period. Very general rules then are all that can be given, or that will prove serviceable, for ordinary use; the filling up, must be left to the future. The symptoms which are the most prominent in one and demand the greatest attention and promptitude of action, may be of minor importance in a second, or completely obscured by their opposites in a third; therefore we

should rely upon the prescriptions of the family physician given as required, rather than blindly depend upon the indiscriminate employment of one medicine or class of medicines. But it may be inquired, if we have the premonitory symptoms, what shall we do? Be rather more guarded in your diet; which of itself will often overcome the difficulty; if not, it may be safe to move the bowels by some gentle laxative; but at a time when there is an almost universal complaint of a derangement in the digestive organs, indicative of a choleraic influence, any more active treatment should not be proceeded with unadvisedly.

Further, if a person be attacked and overpowered by extreme prostration, and coldness of the surface, with spasms &c. when a physician is not at hand, which though possible, is rarely probable, we would advise the administering of a draught of hot peppermint with from 20 to 40 drops of laudanum; but chiefly direct your attention to the use of external means, for counteracting the distressing symptoms; such as the hot air bath, frictions with warm spts. of turpentine, hot chalk, heated platters, jugs of hot water, bags of sand or ashes &c. and during the interim seek for medical advice.

The utmost cleanliness should be advised, both as regards our persons and estates; and this should not only be recommended, but *imperatively insisted* upon; and in *addition* to a faithful cleansing, all unwholesome spots, be they in lanes, alleys, yards, cellars, or elsewhere, should be preserved in a state of purification, by a proper use of disinfectants; e. g. chloride of lime dissolved in the proportion of about one ounce to the

quart of water, or else made into a soft paste with the same; or, in case the spot to be cleaned is so located as not to render a constant passing to and fro, necessary, the atmosphere thereof, may be kept loaded for a time with muriatic acid gas, disengaged from common salt, by pouring oil of vitriol upon it, or by the fumes of nitrous acid, set free in the same manner from saltpetre.

While we would inculcate the importance of being prepared for the approach of this great scourge, we would deprecate all attempts to excite unnecessary alarm, but would rather advise the having our houses duly set in order, that we may with the greater firmness and fortitude be prepared to act like christian men.— The four grand requisites for safety are *temperance, cleanliness, ventilation, and fearlessness*; and of these, important, as they all are, the last cannot be too strongly impressed upon the minds of the community. Indeed on it, should this destroyer approach us, the success of almost every thing depends; and by referring to the accounts, from different places, we shall find as might naturally have been expected, that other things being equal, the mortality was greater or less, according as the individuals were more or less under the influence of the depressing passion of fear. We would advise none to rush heedlessly and headlong into danger, if such there be; none to rashly throw themselves, as if in defiance, into harm's way; but at the same time, we trust that none will be wanting in a faithful discharge of their duty to their fellow beings; as we are fully persuaded that by prudence, comparative freedom from mental anxiety, avoidance of exposure to night air, due

share of rest, &c. there can be little ground for apprehending any serious evil as the result or necessary consequence of waiting upon the sick. It is true that in a few places many medical men have fallen victims to the disease; this however, we think was owing not to its contagiousness, but to a predisposition generated by fatigue, unusual exposure and that harassing solicitude of mind, which every practitioner must experience whenever called upon during the prevalence of extensive sickness, and required to hold himself in constant readiness by night and day, to discharge the highly responsible duties of his profession. This anxiety is of itself more exhausting to the constitution than bodily fatigue, and when coupled therewith, must eventually break down the stoutest frame.

Finally be cheerful, prudent, and virtuous; if such be your life, you have little to dread from Cholera; but should it come among us, being thus prepared, and placing a firm reliance upon the goodness, the justice, the mercy of an allwise and overruling Providence, we may confidently anticipate being enabled to pass through the trying ordeal and escape unscathed.

## APPENDIX.

As it may not be altogether uninteresting to some of our readers to be acquainted with the state of the thermometer and barometer at New York previous to and during the prevalence of this disease, we present for their inspection the following table, regretting at the same time our inability to furnish a complete meteorological diary.

THERMOMETER.					REMARKS.		
Date.	Morng.	Noon.	Night.	Barometer.	Morng.	Noon.	Night.
June	15	63	90	70	29 in.	Wind.	
	16	69	94	78	29,3		
Sunday,	17	74	94	78	29,3		
	18	69	88	74	29,74		
	19	60	74	60	29,80		
	20	54	75	65	30,13	N. clear.	N. clear. S. W. clear.
	21	60	81	66	30,20	S. W. do.	S. W. do. S. W. do.
	22	63	83	67	30,16	S. W. do.	S. W. do. S. W. do.
	23	61	88	71	30	W. do.	N. W. do. W. by N. do.
Sunday,	24	67	84	69	30		
	25	67	90	74		W. S. W. do	S. W. do. S. S. W. do.
	26	68	90	70	29,92	S. clear.	S. cloudy. S. cloudy.
	27	70	90	75	29,70	S. cloudy.	S. rainy. S. clear.
	28	72	87	68	29,80	W. do.	N. W. clear. N. W. do.
	29	62	87	67	30,10	N. W. clear.	N. W. do. S. W. do.
	30	63	85	68	30,20	S. W. do.	S. W. do. S. W. do.
July	1	65	94	78	30,20		
	2	72	95	76	29,40	S. W. clear.	S. clear. S. clear.
	3	74	94	78	29,90	S. do.	S. do. W. do.
	4	72	88	70	29	S. do.	S. do. W. do.
	5	68	87	68	30,4	E. do.	E. do. E. do.
	6	65	89	74	30,2		
	7	72	95	78	29,87	E. do.	E. clear. E. clear.
Sunday,	8	65	82	65			
	9	64	72	63	29,75	S. cloudy.	S. rainy. S. rainy.
	10	62	76	65		S. do.	S. cloudy. S. cloudy.
	11	63	67	59		N. E. rainy.	N. E. do. N. E. rainy.
	12	66	70	72		N. W. clear.	N. W. clear. N. W. clear.



